

## ABSTRACT

A vehicle including a side impact crash sensor, a transfer structure interposed between the side of the vehicle and the sensor and an occupant restraint system such as a side impact airbag system. When an object strikes the side of the vehicle or vice versa, the transfer structure serves

5 to transfer the lateral force from the side of the vehicle to the sensor and is designed so that it does not distort upon the application of the lateral force. The side impact crash sensor detects the force or acceleration applied to the side of the vehicle, and the airbag system connected to the sensor deploys an airbag based on the detected force or acceleration. The transfer structure may be constructed to account for mismatch between the point of impact of an object on the side of

10 the vehicle and the location of the sensor.